**Scientific Process Skills Review**

* Use the triple beam balance, graduated cylinder, and ruler properly to perform investigations.
* Identify variables in a controlled investigation.
* Record data using tables, charts and graphs.
* Write a simple, coherent lab report based on investigations.

**Forces, Motion and Energy**

* Recognize that energy is necessary for change to occur.
* Describe how energy transforms from one form to another (chemical, heat, electrical, sound, light, and mechanical).
* Demonstrate three ways that heat is transferred from one substance to another.
* Predict what an object will do when force is transferred to it.
* Use scientific terms and drawings to describe the motion of an object.

**Astronomy (Earth, Moon and Sun)**

* Describe how the universe is a system of interrelated parts that affect one another.
* Use models to explain how the relative positions of earth, sun and moon produce such observed phenomena as seasons, tides, day and night, and eclipses.
* Explain how gravitational forces affect objects in the solar system.

**Structure and Properties of Matter**

* Recognize that all living and nonliving things are composed of matter (particles) having characteristic properties that distinguish one substance from another.
* Explain what atoms are and how they can combine to make new substances.
* Explain how matter is conserved even when it changes form.
* Explain the difference between mass and weight.
* Explain with concrete objects and mathematical formulas how the relationship of mass and volume expresses density.
* Explain how temperature and the state of matter depend on the energy level of the atoms or molecules.
* Identify and interpret indicators of physical and chemical changes.

**Circulatory and Respiratory Systems**

* State the hierarchy of structure from smallest cells to tissues, organs, organ systems, and whole organisms.
* Predict how changing a part of the system will affect other parts of that system and the entire system.
* Demonstrate an understanding of the structures and interrelationship of the lungs and heart orally and in writing.
* Trace the flow of blood through blood vessels.
* Explain the role of CO2 and O2 in cellular respiration.
* Describe how health can be compromised by an unhealthy lifestyle.

**Rocky Shore Ecology**

* Identify biotic and abiotic factors within an ecosystem.
* Explain how changes to those factors will affect the plants and animals.
* Analyze a food chain (producers, consumers, decomposers), recognizing that energy is flowing through the system.
* Identify common species of the NH rocky shore.
* Describe ways that organisms are adapted to the rocky shore environment, recognizing that adaptations occur over many generations.

**WHAT WILL I LEARN?**

**Scientific Process Skills Unit:**

**I will learn to use the triple beam balance, graduated cylinder, and ruler properly to perform investigations.**

**I will learn to identify variables in a controlled investigation.**

**Independent Variable (Y-Axis) Dependent Variable (X-Axis)**

**I will learn to record data using tables, charts and graphs.**

**I will learn to write a simple, coherent lab report based on investigations.**